



COPY OF PAPERS
ORIGINALLY FILED

MH-5091

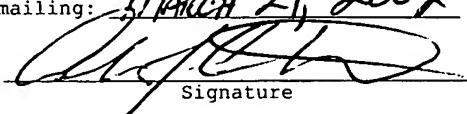
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Ma, et al.
Serial No.: 10/057,179 Group No.: 2681
Filed: January 25, 2002 (Incorrect) Examiner: Unknown

For: Expectation-Maximization-Based Channel Estimation and Signal
Detection for Wireless Communications Systems

I hereby certify that this correspondence is being deposited with the United States Postal Service as FIRST CLASS MAIL in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on:

Date of mailing:

MARCH 21, 2002

Signature

Petition to Correct Filing Date and Date-In Discrepancy Pursuant to 37 CFR 1.10(c)

Assistant Commissioner for Patents
Office of Initial Patent Examination's Customer Service Center
Washington, D.C. 20231

Dear Sir:

Please enter this Petition to Correct Filing Date and Date-In Discrepancy Pursuant to 37 CFR 1.10(c) before examining the application. The correct filing date is January 24, 2002.

Remarks

Applicants hereby petition the Examiner to correct the filing date and date-in discrepancy pursuant to 37 CFR 1.10(c) before examining the application.

Applicants further state that the correct filing date for application serial number 10/057,179 is January 24, 2002.

As evidence, please see the attached a copy of the Express Mail, Post Office to Addressee receipt numbered EV 004299877 US and dated January 24, 2002.

Applicants direct the Examiner's attention to the handwriting on the enclosed Express Mail receipt. Specifically, the applicants ask the Examiner to compare the third digit entered by hand in the "Date In" box in the upper, left-hand corner of the Express Mail receipt, to the last digit entered by hand in the "Total Postage & Fees" box in the center of the Express Mail receipt. Upon comparing the two, it can be seen that the digit entered in the "Date In" box is a four (4) with a closed top, or nearly so, written with a single pen stroke. However, the digit in the "Total Postage & Fees" box is clearly a five (5), written with two separate pen strokes, the upper, horizontal line of the five (5) being distinct and separate from the rest of the digit.

The Express Mail receipt tracking number matches those on the application transmittal letter and cover letter for the application number 10/057,179, copies of which are also enclosed.

As further evidence, applicants enclose a copy showing both sides of a return postcard filed with the application. It is the practice of the applicants' representative to apply postage to the return postcard just prior to sealing the Express mail package and depositing it in a United States Postal Service Express Mail Box located at 1 Kendall Square, Cambridge, MA. The date the postage was applied to the return postcard is January 24, 2002.

Further still, Applicant's enclose a copy of the log kept by applicants' representative, indicating a mailing date of January 24, 2002 for Express Mail package No. EV 004299877 US and further identified as attorney docket number MH-5091, which is the attorney docket number for application number 10/057,179.

Applicants state that this petition falls under 37 CFR 1.10(c) rather than 37 CFR 1.10(d) because the date on the Express Mail receipt was not entered incorrectly. Rather, it is very confusing and difficult to decipher.

Kindly correct the filing receipt to reflect the filing date of January 24, 2002.

Respectfully submitted,

Mitsubishi Electric Research Laboratories, Inc.

By 

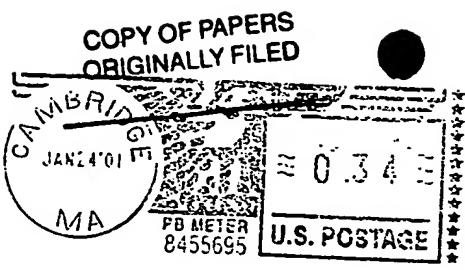
Andrew J. Curtin

Reg. No. 48,485

Attorney for Assignee

201 Broadway, 8th Floor
Cambridge, Massachusetts 02139
(617) 621-7573

RECEIVED
FEB 14 2002



MITSUBISHI ELECTRIC-ITA
201 BROADWAY
CAMBRIDGE, MA 02139

ATTN: A. Currin

24



COPY OF PAPERS
ORIGINALLY FILED



Expectation-Maximization-Based Cobamate Estimation
Title: and Signal Detection for Wireless Communication Systems
Applicant: MA et al Filed: HEREWITHIN

Application No. _____ Patent No. _____ Docket No. W4-5091

Enclosed is the following:

Transmittal Letter in triplicate;

Application including Pgs. 1 - 24 of Spec.;

25 - 30 of claims and pg. 31 of Abstract;

Declaration and Power of Attorney;

Informal/Formal Drawings

2 Sheets of Figs. 1 - 7;

Letter to Chief Draftsman;

Amendment;

Information Disclosure Statement, Form 1449;

____ refs;

Assignment, Recordation Cover Sheet;

Date Mailed: 1-24-02

Date Due:

Initials: RJC

Express Mail Receipt No. EV 004299877 US

Receipt Date & Application No.

J1050 U.S. PTO
10/057179



01/25/02



COPY OF PAPERS
ORIGINALLY FILED

MH-5091

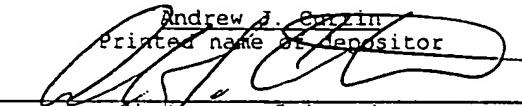
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

"EXPRESS MAIL" mailing label number: EV 004299877 US

Date of Deposit: 1-24-02

I hereby certify that this paper or fee is being deposited with the United States Postal Service "EXPRESS MAIL Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Andrew J. Cenin
Printed name of depositor


Signature of depositor

* * *

TRANSMITTAL LETTER

The Assistant Commissioner for Patents
Washington, D.C. 20231

ATTN: BOX PATENT APPLICATION

Sir:

Transmitted herewith for filing is the patent application of: Xiaoqiang Ma, Hisashi Kobayashi, Stuart c. Schwartz

FOR: Expectation-Maximization-Based Channel Estimation and Signal Detection for Wireless Communications Systems

Enclosed are:

- [31] pages of specification, claims and abstract
- [7] sheet of formal drawings
- [x] Declaration and Power of Attorney
- [X] Assignment of the application
- [] Information Disclosure Statement

The filing fee is calculated as follows:

COPY OF PAPERS
ORIGINALLY FILED

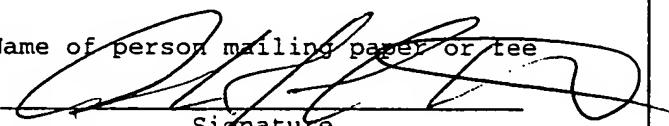


EXPRESS MAIL number: EV 004299877 US

Date of Deposit: 1-24-02

I hereby certify that this paper is being deposited with the United States Postal Service "EXPRESS MAIL Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, DC 20231.

Name of person mailing paper or fee


Signature
Andrew J. Curtin

=====

APPLICATION FOR UNITED STATES LETTERS PATENT

=====

Title: **Expectation-Maximization-Based Channel Estimation and Signal Detection for Wireless Communications Systems**

Inventors: Xiaoqiang Ma
 Hisashi Kobayashi
 Stuart C. Schwartz
 Daqing Gu
 Jinyun Zhang

115

PROJECT NAME _____

NOTEBOOK NO. _____

DATE	DOCKET #	DESCRIPTION	TO	VIA
12/28/01	VG0135	ISSUE FEE	PTO	MAIL.
1/1/02			AL	MAIL
1/14/02	MH-5093	APPLICATION	PTO mh-5093 EV004299625US	EXPRESS MAIL
1/19/02	VG0-111,133,139	DRAWINGS	AL	MAIL
1/15/02	MH-5090	APPLICATION	PTO mh-5093 EV004299639US	EXPRESS MAIL
1/15/02	MERL-1287	INVENTOR ADDRESS	SOGA	AIR MAIL
1/18/02	MERL-1277	EPO RESPONSE	SOGA	AIR MAIL.
1/18/02	ATL-024	FINAL R&T. RESPONSE	PTO	MAIL.
1/21/02	CR-1359	APPLICATION	USPTO EV004299885US	EXPRESS MAIL
1/21/02	MH-5086	APPLICATION	USPTO EV004299642US	EXPRESS MAIL
1/23/02	CR-1301, 1314, 1322, 1326 1329, 1331, 1333, 1335, 1336 1337, 1338, MERL 1250	FOREIGN FILLED	MELCO 400-27214235	FED EX
1/23/02	VG0-122, 123, 129, 138	OFFICE ACTIONS	AL 346 7440925	FED EX
1/24/02	CR-1317, 1320	FOREIGN FILM	MELCO 400-27219323	FED EX
1/30/02	MH-5094	APPLICATION	PTO EV004299827US	EXPRESS MAIL
1/31/02	CR-1300	CERT COPY REQUEST	PTO	MAIL
1/31/02	MH-5062	CERT COPY REQUEST	PTO	MAIL
1/31/02	MH-5063	CERT COPY REQUEST	PTO	MAIL
SIGNATURE _____ READ AND UNDERSTOOD _____			DATE	19
			DATE	19

COPY OF PAPERS
ORIGINALLY FILED

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
10/057,179	01/25/2002	2681	740	MH-5091	7	20	2

01/24/2002

Patent Department
Mitsubishi Electric Research Laboratories, Inc.
201 Broadway
Cambridge, MA 02139



CONFIRMATION NO. 5294

FILING RECEIPT



OC00000007516221

Date Mailed: 02/22/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Xiaoqiang Ma, Princeton, NJ;
Hisashi Kobayashi, Princeton, NJ;
Stuart C. Schwartz, Princeton, NJ;
Daqing Gu, Morris Plains, NJ;
Jinyun Zhang, New Providence, NJ;

Domestic Priority data as claimed by applicant**Foreign Applications****If Required, Foreign Filing License Granted 02/21/2002****Projected Publication Date: To Be Determined - pending completion of Corrected Papers****Non-Publication Request: No****Early Publication Request: No****Title**

Expectation-maximization-based channel estimation and signal detection for wireless communications systems

Preliminary Class

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

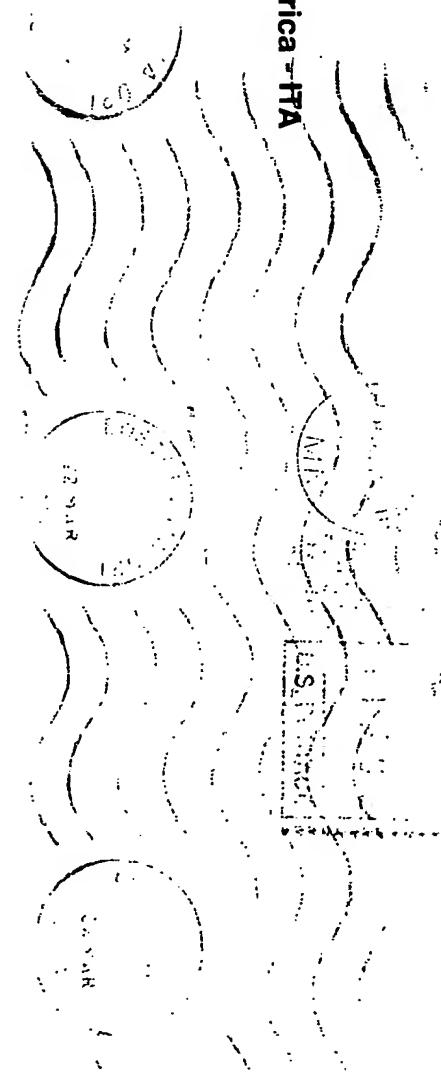


MITSUBISHI ELECTRIC

Mitsubishi Electric Information Technology Center America - ETIA

Mitsubishi Electric Research Laboratory - MERL

201 Broadway, Cambridge, MA 02139



RECEIVED

APR 01 2002

USPTO MAIL CENTER

Asst. Commissioner for Patents
Box Missing Parts
Washington, D.C. 20231

**USPS.COM**[Home](#) | [Sign In](#) | [Find ZIP Codes](#) | [Calculate Postage](#) | [Change Address](#) | [Locate Post Offices](#) | [Track/Confirm](#)**Shipping center**[Ship](#)[Rates](#)[Supplies](#)[Web Tools](#)**Track & Confirm**[Delivery Confirmation](#)[Signature Confirmation](#)[Keyword/Search](#)**► Shipping center *Track & Confirm*****Shipment History**

You entered EV00 4299 877U S

Your item was delivered at 7:50 am on January 28, 2002 in WASHINGTON, DC 20231 to PATENTS 20231. The item was signed for by M BOSTON.

Here is what happened earlier:

- NOTICE LEFT, January 26, 2002, 11:48 am, WASHINGTON, DC 20231
- ACCEPTANCE, January 25, 2002, 6:16 pm, BOSTON, MA 02206

Track & ConfirmEnter number from shipping receipt
the field below:[Request Delivery Record >](#)**POSTAL INSPECTORS**
Preserving the Trust[site map](#) | [contact us](#) | [FAQs](#) | [search](#) | [keywords](#)Copyright © 1999-2001 USPS. All Rights Reserved. [Terms of Use](#) [Privacy Policy](#)

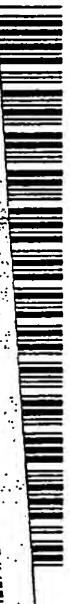
**COPY OF PAPERS
ORIGINALLY FILED**



**EXPRESS
MAIL**

**POST OFFICE
TO ADDRESSEE**

FY 004299877 US



Customer Copy
Label 11-F August 2000

 EXPRESS MAIL UNITED STATES POSTAL SERVICE®		POST OFFICE TO ADDRESSEE	
 EV 004299877 US			
ORIGIN (POSTAL USE ONLY)			
PO ZIP Code <input checked="" type="radio"/> 02206		Day of Delivery <input checked="" type="checkbox"/> Next <input type="checkbox"/> Second	
		Date In	Postage
		1 Day 2 5 6 2	\$
		12 Noon 3 PM	Return Receipt Fee
		1st Day 2nd Day 3rd Day	COD Fee Insurance Fee
Time In <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		Int'l Alpha Country Code	
<input type="checkbox"/> CUS <input type="checkbox"/> MET <input type="checkbox"/> SPT		Weight 1 lbs. 11 ozs.	
No Delivery <input type="checkbox"/> Weekend <input type="checkbox"/> Holidays		Acceptance Clerk Initials <u>S</u>	
CUSTOMER USE ONLY METHOD OF PAYMENT: Express Mail Corporate Acct. No. <u>REDACTED</u>		Total Postage & Fees <u>16.25</u>	
SEE REVERSE SIDE FOR SERVICE GUARANTEE AND LIMITS ON INSURANCE COVERAGE			
<small> WAIVER OF SIGNATURE (Domestic Only) Additional Premiums will be charged if waiver of signature is requested. Wish delivery to be made without signature. Waiver of signature and signature on behalf of addressee's agent or attorney constitutes valid proof of delivery. Signature on behalf of addressee's agent or attorney constitutes valid proof of delivery. Signature on behalf of addressee's attorney constitutes valid proof of delivery. Signature on behalf of addressee's attorney constitutes valid proof of delivery. </small>			
<small> Federal Agency Acct. No. _____ Postal Service Acct. No. _____ </small>			
<small> TO: PLEASE PRINT PHONE: <u>617-621-7573</u> </small>			
<small> FROM: PLEASE PRINT PHONE: <u>REDACTED</u> </small>			
<small> A.C.20 MITSUBISHI ELECTRIC RESEARCH LABORATORY 201 BROADWAY FL 8 CAMBRIDGE MA 02134-1955 </small>			
<small> Assistant Commissioner for Parents Box DADENT Application <u>Washington</u> D.C. 20231 </small>			

You're
THE

24

१७९

FOR PICKUP OR TRACKING CALL 1-800-222-1811

www.usps.com